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APPLICATION NO.	ICATION NO. FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/803,539	03/18/2004	03/18/2004 Masataka Kano		5656		
27572 75	90 12/11/2006		EXAM	EXAMINER.		
HARNESS, DICKEY & PIERCE, P.L.C.			ZACHARIA,	ZACHARIA, RAMSEY E		
P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			ART UNIT	PAPER NUMBER		
BEOOMI IEEB	1111111111111 40303		1773			
			DATE MAILED: 12/11/200	DATE MAILED: 12/11/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	Applicant(s)				
Office Action Summary		10/803,539	KANO, MASATA	KANO, MASATAKA				
		Examiner	Art Unit					
_	·		Ramsey Zacharia	1773				
Period fo	The MAILING DATE of this communic or Reply	ation appe	ears on the cover sheet with t	he correspondence a	ddress			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE MA asions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statue to reply within the set or extended period for reply within t	ILING DA 37 CFR 1.130 nication. itory period wi ill, by statute, o	TE OF THIS COMMUNICATION IN THE REPORT OF THIS COMMUNICATION IN THE REPORT OF THE REPO	FION. be timely filed from the mailing date of this of DONED (35 U.S.C. § 133).				
Status								
1)⊠	Responsive to communication(s) filed	on 21 No	wember 2006		•			
·	Responsive to communication(s) filed on <u>21 November 2006</u> .  This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
	,	•		prosecution as to th	e merite is			
٥,۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	·			.,				
·	sposition of Claims							
· · · · · ·	<ul> <li>✓ Claim(s) 3 and 6 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> </ul>							
		williaw	ii irom consideration.					
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are allowed.							
	☑ Claim(s) <u>3 and 6</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)[]	Claim(s) are subject to restriction	on and/or	election requirement.					
Applicati	on Papers							
9)[	The specification is objected to by the	Examiner						
10)[	The drawing(s) filed on is/are: a	a) acce	pted or b) objected to by	he Examiner.				
	Applicant may not request that any objecti	on to the d	rawing(s) be held in abeyance.	See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	ne correctio	on is required if the drawing(s) i	s objected to. See 37 C	FR 1.121(d).			
_	The oath or declaration is objected to b			•	• •			
Priority u	nder 35 U.S.C. § 119							
_	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment	t(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
	e of Draftsperson's Patent Drawing Review (PTC	D-948)		ail Date				
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		5)  Notice of Inform 6) Other:	nai Patent Application				

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#### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 November 2006 has been entered.

#### Claim Objections

3. Claim 3 is objected to because of the following informalities: it appears that "comprising" on line 4 of the claim should be --comprises--. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

4. Claims 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al. (WO 02/37500 A1).

Yang et al. teach a bistable electrical device that may be used to form a memory device wherein a memory input element is provided for applying voltage to the bistable body (paragraph 0011). The bistable device comprise a first electrode, a second electrode, and a bistable body

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between the two electrodes (Figure 1 and paragraph 0030). The bistable body may be in the form of a single layer (Figure 1 and paragraph 0033). Alternatively, the bistable body may comprise a single layer consisting of low conductivity material (in addition to others layers comprising a high conductivity material) (Figure 2 and paragraph 0034). The bistable body comprises a low conductivity material (paragraph 0033). The low conductivity material may be 2-amino-4,5-imidazoledicarbonitrile (paragraph 0037), which reads on the compound I of the instant claims wherein  $R_1 = -NH_2$  and  $R_2 = R_3 = -CN$ . One of the electrodes is formed by deposition of the electrode material onto a substrate (paragraph 0045). The memory input element or control unit reads on the limiter.

### Response to Arguments

5. Applicant's arguments filed 21 November 2006 have been fully considered but they are not persuasive.

The applicant argues that the bistable body of Yang et al. comprises at least two components (the low conductivity material and high conductivity material) in contrast to the claimed invention which recites an organic thin film consisting essentially of the organic compound of formula (I).

This is not persuasive for the following reasons. First, the transitional phrase "consisting essentially of" does not limit the scope of a claim to the specified materials. Rather the phrase limits the scope of a claim to the specified materials and those that do not materially affect the basic and novel characteristics of the claimed invention. Without a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting

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essentially of" is to be construed as equivalent to "comprising" for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103. It is the applicant's burden to establish that an element in a prior art invention is excluded from the claims by consisting essentially of language. See MPEP § 2111.03. In the instant case, the applicant has failed to establish that the inclusion of the high conductivity material of Yang et al. would materially affect the basic and novel characteristics of the claimed invention.

Moreover, while the claimed organic thin film is a single layer, the organic bistable element *comprises* the organic thin film between first and second electrodes. The open language of the organic bistable element allows for the presence of other layers, such as a layer of high conductivity material as shown in Figure 2 of Yang et al.

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Tech Center 1700